93. The method of claim 92, wherein said disorder is a coagulation defect.

94. The method of claim 92, wherein said Factor IX protein is diffusible and is delivered to the circulating blood.

95. The method of claim 92, wherein said promoter is a constitutive viral promoter.

96. The method of claim 95, wherein said constitutive viral promoter is the MFG promoter.

97. The method of claim 92, wherein said promoter, enhancer, or promoter and enhancer is liver specific.

98. The method of claim 92, wherein said administering comprises injecting said rAAV into the portal vasculature of said mammal.

99. The method of claim 92, wherein said administering comprises injecting said rAAV intravenously into said mammal.

100. A method of expressing a Factor IX protein in a mammal, comprising: administering recombinant adeno-associated virus (rAAV) particles to a mammalian liver cell, wherein said rAAV particles comprise a polynucleotide encoding Factor IX operably linked to a promoter, enhancer, or promoter and enhancer, and wherein following infection of said mammalian cells, Factor IX protein is expressed in the liver.

101. The method of claim 100, wherein said Factor IX protein is diffusible and is delivered to the circulating blood.

102. The method of claim 100, wherein said promoter is a constitutive viral promoter.

103. The method of claim 102, wherein said constitutive viral promoter is the MFG promoter.

104. The method of claim 100, wherein said promoter, enhancer, or promoter and enhancer is liver specific.

105. The method of claim 100, wherein said administering comprises injecting said rAAV into the portal vasculature of said mammal.

106. The method of claim 100, wherein said administering comprises injecting said rAAV intravenously into said mammal.

107. The method of claim 100, wherein said rAAV comprises two adeno-associated virus (AAV) inverted terminal repeats, wherein said inverted terminal repeats flank said enhancer, promoter or both an enhancer and a promoter, a splice donor acceptor site or intervening sequence and said structural gene encoding Factor IX.

108. The method of claim 100, wherein said liver specific promoter or enhancer is selected from the group consisting of the albumin promoter, the α fetoprotein promoter, the α fetoprotein enhancer, the human apolipoprotein E (ApoE) promoter, HCR-1, HCR-2, the AI apolipoprotein liver-specific enhancer and the α1-antitrypsin promoter.

109. A pharmaceutical composition for treating a blood disorder comprising, recombinant adeno-associated virus (rAAV) particles comprising a structural gene encoding human Factor IX; an enhancer, promoter or both an enhancer and a promoter; a splice donor acceptor site or intervening sequence (IVS); and inverted terminal repeats flanking said

Factor IX structural gene, said enhancer and/or promoter and said splice donor acceptor site or IVS together with a pharmaceutically acceptable carrier.

110. The pharmaceutical composition of claim 109, wherein said promoter comprises a liver specific promoter and said enhancer comprises a liver specific enhancer.

111. The pharmaceutical composition of claim 109, wherein said promoter is a constitutive viral promoter.

112. The pharmaceutical composition of claim 111, wherein said constitutive viral promoter is the MFG promoter.

113. The pharmaceutical composition of claim 109, wherein said liver specific promoter or enhancer is selected from the group consisting of the albumin promoter, the α fetoprotein promoter, the α fetoprotein enhancer, the human apolipoprotein E (ApoE) promoter, HCR-1, HCR-2, the AI apolipoprotein liver-specific enhancer and the α 1-antitrypsin promoter.

114. The pharmaceutical composition of claim 109, wherein said blood disorder is a coagulation defect.--

Kindly cancel without prejudice claims 48 and 54.

REMARKS

Page 26, lines 9-11 of the instant specification teach operable linkage of the genetic elements that operate to obtain expression of Factor IX. Difffusible Factor IX found in the circulation is taught from page 18, line 30 through page 19, line 16 of the instant application.

As no issue of new matter arises, entry of the new claims is requested respectfully.